

# ATTACHMENT I

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

MMB Docket No. 1781-0017

Urquhart Ref. No. **SJB/P11755US**

Application of: **Farrar et al.**

Group Art Unit: **3733**

Serial No. **10/524,800**

Examiner: **N. Woodall**

Filing Date: **January 17, 2006**

For: **Guide Block for Use in Surgery**

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on February 19, 2008  
(Date of Deposit)

Paul J. Maginot

Name of person mailing Document or Fee

*Paul J. Maginot*

Signature of person mailing Document or Fee

February 19, 2008

Date of Signature

## RESPONSE TO OFFICE ACTION

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In response to the Office Action mailed November 19, 2007 (hereinafter "the Office Action"), please enter the following:

## REMARKS

Claims 1-13 are pending in this patent application. Reconsideration of this patent application is respectfully requested.

### **First 35 U.S.C. § 103 Rejection**

Claims 1-9 were rejected under 35 U.S.C. § 103 as being unpatentable over by Millard (U.S. Patent No. 6,712,824) in view of Muller (U.S. Publication No. 2001/0018589). Applicants respectfully request reconsideration of claims 1-9.

#### Discussion re: Patentability of Claim 1

Presumably, in an attempt to arrive at the invention of Applicants' claim 1, the Office Action states that "[i]t would have been obvious to one having ordinary skill in the art ... to manufacture the device of Millard further comprising a signal generator coupled to the drives in view of Muller ... ." (See Office Action at page 3, last line through page 4, line 3.) And further the Office Action states this would have been obvious "in order to automatically adjust the guide part." (See Office Action at page 4, line 3.)

Muller teaches a milling cutter 1 having a rotating milling head 2 as shown in Muller's figure 1. The milling cutter 1 is configured to prepare a surface of a femur or tibia by cutting or milling bone portions therefrom. A positioning system is attached to the milling cutter 1 so as to advance the milling cutter 1 during a cutting or milling operation on bone. In particular, the milling cutter 1 is moved in

relation to a bone so that the rotating milling head 2 is advanced in a milling plane to cut or mill a surface of the bone. Muller mentions that the motion of the milling head in the milling plane can be carried out by use servo motors, the triggering of the servo motors being controlled by a computer. (See Muller at paragraph [0018].)

It would not have been reasonably obvious to one skilled in the art in view of Muller to modify the Millard system so that its positioning apparatus P includes *a signal generator which is connected to the drives for generating position signals which can be transmitted to the drives to cause the guide part to be moved relative to the fixation part ...* as called for in claim 1. Significantly, the context in which the servo features are contemplated in the Muller reference is very different from that in the Millard system. Indeed, the servo features in Muller are contemplated to control motion of the cutting instrument during a cutting step of preparing bone to receive an implant. In other words, it is the movement of the cutting instrument itself which is being controlled. In contrast, the Millard reference is concerned with a very different approach to preparing bone. The Millard reference involves fastening a cutting guide in fixed relation to a bone. This then allows a cutting instrument (such as a saw) to be manipulated during a cutting operation to cut bone, with the position of the cutting instrument being controlled manually with reference to the fixed cutting guide.

One skilled in the art seeking to automate control of the movement of the cutting instrument would learn from the Muller document to incorporate position monitoring and servo features into the cutting instrument itself. Indeed, this is the

entire thrust of the teaching contained in the Muller document. The Muller document actually teaches away from the use of a cutting guide as provided in the invention of claim 1. The Office Action has referred to a single passage in the Muller document, while ignoring the fact that the document as a whole teaches away from the invention of claim 1.

In view of the above, it would not have been reasonably obvious to one skilled in the art in view of Muller to modify the Millard system so that its positioning apparatus P includes *a signal generator which is connected to the drives for generating position signals which can be transmitted to the drives to cause the guide part to be moved relative to the fixation part ...* as called for in claim 1. As a result, the proposed combination of Millard in view of Muller does not establish a prima facie case of obviousness under 35 U.S.C. § 103 with regard to the invention of claim 1.

Further, it should be noted that the Muller document does not provide any teaching as to how the servo motor features could be incorporated into a guide block system. This is, of course, because the Muller reference is not actually concerned with a surgical technique which involves the use of guide blocks:

It is significant to note that, to the best of the Applicants knowledge, guide blocks for use in orthopaedic surgery have not previously made use of drives which can be actuated using signals which are generated by means of a position monitor and associated signal generator. The approach according to the invention defined in claim 1 represents a significant departure from existing guide block techniques.

#### Discussion re: Patentability of Claims 2-9

Each of claims 2-9 depends directly or indirectly from claim 1. As a result, each of claims 2-9 is allowable for, at least, the reasons hereinbefore discussed with regard to claim 1.

#### **Second 35 U.S.C. § 103 Rejection**

Claims 1, 2, 4-6, and 8-13 were rejected under 35 U.S.C. § 103 as being unpatentable over Pohl (U.S. Patent No. 4,703,751) in view of Millard (U.S. Patent No. 6,712,824), and further in view of Muller (U.S. Publication No. 2001/0018589). Applicants respectfully request reconsideration of claims 1, 2, 4-6, and 8-13.

#### Discussion re: Patentability of Claim 1

In an attempt to arrive at the invention of Applicants' claim 1, the Office Action states that "[i]t would have been obvious to one having ordinary skill in the art ... to manufacture the device of Pohl further comprising ... a signal generator [coupled to the drives] in view of Muller ... ." (See Office Action at page 6, lines 6-9.) And further the Office Action states this would have been obvious "in order to automatically adjust the guide part." (See Office Action at page 6, lines 9-10.)

As properly pointed out by the Office Action (at page 5, lines 18-22), Pohl fails to disclose a device that includes a signal generator coupled to the drives

capable of generating position signals transmitted to the drives to adjust the guide part. The Office Action (at page 3, lines 18-20) also acknowledges that the Millard reference fails to teach this feature. As discussed above, Muller teaches using servo motors to control motion of a cutting instrument during a cutting step of preparing bone to receive an implant.

It would not have been reasonably obvious to one skilled in the art in view of Muller to modify the Pohl device (having the position indicator of Millard) so that its positioning apparatus 10 includes *a signal generator which is connected to the drives for generating position signals which can be transmitted to the drives to cause the guide part to be moved relative to the fixation part ...* as called for in claim 1. As was true with Millard, the context in which the servo features are contemplated in the Muller reference is very different from that in the Pohl system. As discussed above, the servo features in Muller are contemplated to control motion of the cutting instrument during a cutting step of preparing bone to receive an implant. In contrast, the Pohl reference is concerned with a very different approach to preparing bone. The Pohl reference involves fastening a cutting guide in fixed relation to a bone. This then allows a cutting instrument (such as a saw) to be manipulated during a cutting operation to cut bone, with the position of the cutting instrument being controlled manually with reference to the fixed cutting guide.

Again, one skilled in the art seeking to automate control of the movement of the cutting instrument would learn from the Muller document to incorporate position monitoring and servo features into the cutting instrument itself.

In view of the above, it would not have been reasonably obvious to one skilled in the art in view of Muller to modify the Pohl system (having the position indicator of Millard) so that its positioning apparatus 10 includes *a signal generator which is connected to the drives for generating position signals which can be transmitted to the drives to cause the guide part to be moved relative to the fixation part ...* as called for in claim 1. As a result, the proposed combination of Pohl in view of Millard, and further in view of Muller, does not establish a prima facie case of obviousness under 35 U.S.C. § 103 with regard to the invention of claim 1.

#### Discussion re: Patentability of Claims 2, 4-6, and 8-13

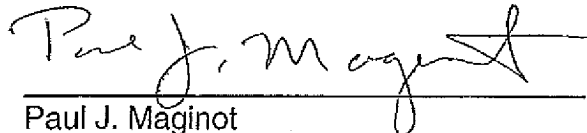
Each of claims 2, 4-6, and 8-13 depends directly or indirectly from claim 1. As a result, each of claims 2, 4-6, and 8-13 is allowable for, at least, the reasons hereinbefore discussed with regard to claim 1.

## Conclusion

In view of the foregoing amendments and remarks, it is submitted that this application is in condition for allowance. Action to that end is hereby solicited. It is respectfully submitted that, if necessary to effect a timely response, this paper be considered as a Petition for an Extension of Time sufficient to effect a timely response, and any deficiency in fees be charged, or any overpayment in fees be credited, to our Deposit Account No. 13-0014.

Respectfully submitted,

MAGINOT, MOORE & BECK LLP

A handwritten signature in cursive script, reading "Paul J. Maginot", written over a horizontal line.

Paul J. Maginot  
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February 19, 2008

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## TRANSMITTAL LETTER FOR RESPONSE TO OFFICE ACTION

MMB Docket No. 1781-0017

Urquhart Reference: SJB/P11755US

Group Art Unit: 3733

Application of: Farrar et al.

Examiner: Nicholas W. Woodall

Serial No. 10/524,800

Confirmation No. 5890

Filing Date: January 17, 2006

Title: Guide Block for Use in Surgery

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February 19, 2008  
(Date of Deposit)

Paul J. Maginot

Name of person mailing Document or Fee

Paul J. Maginot  
Signature of person mailing Document or Fee

February 19, 2008

Date of Signature

TO THE COMMISSIONER OF PATENTS:

Transmitted herewith is a Response to Office Action in the above-identified patent application. Since the due date for filing this Response was Monday, February 18, 2008, which was a federal holiday, this Response is being timely filed on Tuesday, February 19, 2008. The fee has been calculated as shown below.

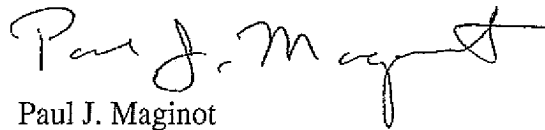
### CLAIMS AS AMENDED

	Claims Remaining After Amendment	Highest No. Paid For	Fee Calculation	Additional Fee
Total Claims	13	20	0 X 50	\$0.00
Independent Claims	1	3	0 X 210	\$0.00
Total Additional Fee Required				\$0.00

Please provide any extensions of time that may be necessary and charge any fees that may be due to Deposit Account No. 13-0014, but not to include any payment of issue fee.

Respectfully submitted,

MAGINOT, MOORE & BECK LLP

A handwritten signature in cursive script, appearing to read "Paul J. Maginot".

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February 19, 2008

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February 19, 2008 PLEASE RETURN THIS CARD

Response to Office Action for patent application entitled: Guide  
Block for Use in Surgery

Serial No. 10/524,800

Applicant: Farrar et al.

Filing Date: January 17, 2006

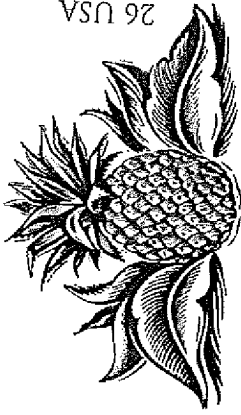
Urquhart Reference: SJB/P11755US

MMB Docket No. 1781-0017

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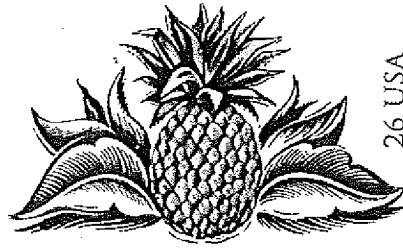
- ☒ Transmittal Letter (2 pages)
- ☒ Response to Office Action (8 pages)

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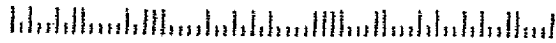


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# ATTACHMENT II



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10/2007 USPS 4610-100

February 19, 2008 PLEASE RETURN THIS CARD

Response to Office Action for patent application entitled: Guide  
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Serial No. 10/524,800  
Applicant: Farrar et al.  
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FEB 20 2008



**Includes:**

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